

Notice of Allowability

Application No.

09/814,619

Examiner

Phirin Sam

Applicant(s)

CONNERY ET AL.

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/15/2004.
2. ☒ The allowed claim(s) is/are 21-40.
3. ☒ The drawings filed on 22 March 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 5/6/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


PHIRIN SAM
PRIMARY EXAMINER

DETAILED ACTION

Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance:

Regarding claims 21-28, prior arts do not disclose a system comprising a combination of

- (1) the network adapter (i) reads each of the plurality of data packets to determine whether each respective data packet is within a flow specification that identifies a block of data for the application, (ii) separates a payload from each respective data packet within the flow specification, and (iii) transfers the payload from each respective data packet within the flow specification into the target buffer bypassing the one or more intermediate buffers.

Regarding claims 29-32, the prior arts do not disclose a network interface card comprising a combination of:

- (1) the software instructions include instructions to (i) read control data included in each of the received data packets, (ii) determine from the control data whether each received data packet is part of a flow specification subject to memory buffer bypass, and (iii) send payload data of each received data packet that is part of the flow specification to a target buffer for a high layer of a multi-protocol stack bypassing a respective buffer for each of one or more lower layers of the multi-protocol stack.

Regarding claims 33-36, the prior arts do not disclose a method for sending a block of data from a data source, method comprising a combination of:

- (1) each header fragment includes control data that indicates (i) the data packet is within the flow specification, and (ii) a payload of each payload fragment is to be sent directly to the target

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buffer via the network interface bypassing a respective buffer for one or more lower layers of the protocol stack, wherein the target buffer is for a high layer of the protocol stack.

Regarding claims 37-40, the prior arts do not disclose a method for transferring a plurality of data packets received via a network interface, the method comprising a combination of:

- (1) separating a respective payload from each of the plurality of data packets that is part of the flow specification; and
- (2) transferring each respective payload into a high layer buffer for an application operating according to a multi-layer protocol stack, bypassing one or more intermediate buffers of the protocol stack.

Conclusion

2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phirin Sam whose telephone number is (571) 272-3082. The examiner can normally be reached on Mon-Fri, 8:00AM - 4:30PM.

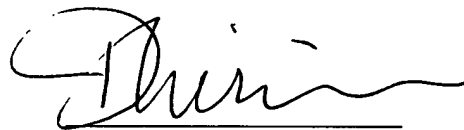
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on (571) 272 - 3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully submitted,

Date: May 6, 2005

A handwritten signature in black ink, appearing to read "Phirin", written over a horizontal line.

**PHIRIN SAM
PRIMARY EXAMINER**